A-movement in Russian *tough*-constructions

Daniar Kasenov (New York University)

May 6, 2025

Abstract

English-style *tough*-constructions are often argued to involve an Ā-movement step. This squib examines Russian *tough*-constructions and concludes that they involve true A-movement from the embedded non-finite clause. Therefore, one finds cross-linguistic variation with respect to the syntactic structure of *tough*-constructions. I preliminarily suggest that the syntactic differences may be partially attributed to the cross-linguistic variation in the realization of the argument structure of similar predicates: namely, on the basis of possibility of VP ellipsis in the embedded clause, I argue that in *tough*-constructions, English embedded clauses are attached higher than Russian embedded clauses, which may account for the opacity for extraction of the former and the transparency for extraction of the latter.

Keywords: tough-movement, A-movement, clausal embedding, extraction

1 Introduction

English *tough*-constructions have been a bane of syntactic theory for a long time and have invited a variety of theoretical approaches (see Hicks 2017 for a recent overview). The crux of the issue

is that *tough*-constructions seem to exhibit two contradictory properties: first, there is solid evidence that there is an Ā-movement step involved in their derivation (Chomsky 1977; Montalbetti, Saito & Travis 1982; Thoms 2011; among others), but, second, there are reasons to suspect an A-movement step as well (see the overview in Brillman 2017, for example). I provide one reason to suspect A-movement: lack of case connectivity between the gap in the embedded clause and the overt phrase. The mainstream analysis (championed by Chomsky 1977 and recently defended by Gluckman 2022; Salzmann 2023, to name a few) is the null operator analysis: inside the non-finite clause, there is a null operator that undergoes Ā-movement to the left periphery, which enters a semantic relationship with the *tough*-subject that undergoes A-movement.

(1) John$_j$ is ___$_j$ tough [Op$_i$ PRO to defeat ___$_i$]
A Ā

This squib presents an exploration of *tough*-constructions in Russian which differ from English ones in at least one important respect: they do show case connectivity effects, as shown in (2). The presented data comes from the judgements of 5 Russian speakers, all aged 20–30, who live in Moscow.

(2) a. *Vasju tjaželo ljubit* ___
Vasja.ACC hard.N.SG love.INF
'Vasja is hard to love.'

b.* *Vasja tjaželo ljubit* ___
Vasja.NOM hard.N.SG love.INF
Int: 'Vasja is hard to love.'

c.* *Vasja* *tjažel* *ljubit* ___

Vasja.NOM hard.M.SG love.INF

Int: 'Vasja is hard to love.'

While the presence of case connectivity may suggest an Ā-approach, the core claim of this squib is that Russian *tough*-constructions involve true A-movement, as I argue on the basis of A-minimality effects inside the non-finite clause: Russian *tough*-movement is impossible across an intervening nominal phrase. It thus appears that *tough*-constructions are subject to cross-linguistic variation with respect to their structure: for example, a *tough*-construction is not necessarily a partially Ā-dependency. At the end of the squib, I provide some speculative remarks regarding the differences between English and Russian that give rise to distinct syntactic pathways to *tough*-construction.

2 A-minimality in Russian *tough*-constructions

This section argues that the filler-gap dependency in Russian *tough*-constructions is derived through A-movement. The argument is based upon A-minimality: Russian *tough*-movement is blocked by an intervening nominal phrase. I first show that the movement step cannot occur across an intervening nominal phrase inside the embedded clause. Then, I show that apparent violations of minimality with an overt experiencer in the matrix clause are actually derived via Ā-movement, as diagnosed by reciprocal binding and weak crossover effects. The conclusion, then, is that Russian *tough*-movement is constrained by A-minimality and, thus, appears to be A-movement.

2.1 A-minimality inside the embedded clause

Consider what happens if the embedded clause is additionally embedded under a clause-embedding predicate *ubeditj* with an overt object. Example (3a) shows a licit *tough*-construction. Examples (3b-c) show that if a clause embedding verb is present in the embedded clause, only its object may be extracted.

(3) a. *vodku*$_1$ *tjaželo* *pitj* ___$_1$ *bez* *zakuski*
vodka.ACC hard.N.SG drink.INF without chaser
'Vodka is hard to drink without a chaser.'

b. *Antona*$_1$ *tjaželo* *ubeditj* ___$_1$ *pitj* *vodku* *bez* *zakuski*
Anton.ACC hard.N.SG convince.INF drink.INF vodka.ACC without chaser
'Anton is hard to convince to drink vodka without a chaser.'

c.* *vodku*$_1$ *tjaželo* *ubeditj* *Antona* *pitj* ___$_1$ *bez* *zakuski*
vodka.ACC hard.N.SG convince.INF Anton.ACC drink.INF without chaser
'Anton is hard to convince to drink vodka without a chaser.'

As examples in (4) show, the culprit behind the degraded status of (3c) is not additional embedding: clause-embedding predicates that do not project their own objects do not block extraction from the most embedded clause (4a-b). In fact, as far as no additional arguments are projected, one is able to embed as much as allowed by the working memory (4c).

(4) a. *vodku*$_1$ *tjaželo* *xotetj* *pitj* ___$_1$ *bez* *zakuski*

vodka.ACC hard.N.SG want.INF drink.INF without chaser

'Vodka is hard to want to drink without a chaser.'

b. *vodku*$_1$ *tjaželo* *načinatj* *pitj* ___$_1$ *bez* *zakuski*

vodka.ACC hard.N.SG start.INF drink.INF without chaser

'Vodka is hard to start to drink without a chaser.'

c. *vodku*$_1$ *tjaželo* *xotetj* *načinatj* *pitj* ___$_1$ *bez* *zakuski*

vodka.ACC hard.N.SG want.INF start.INF drink.INF without chaser

'Vodka is hard to want to start to drink without a chaser.'

Therefore, it seems that extraction is blocked only if there is a nominal that c-commands the extraction site, suggesting that A-minimality is at play. Next subsection examines a counterexample that comes from overt experiencer argument of the *tough*-predicate.

2.2 Intervention by the experiencer

If movement in Russian *tough*-construction is constrained by A-minimality, we might expect that an overt experiencer of the *tough*-predicate will block extraction. However, optionality is observed.

(5) a. *mne* *tjaželo* *pitj* *vodku* *bez* *zakuski*

1SG.DAT hard.N.SG drink vodka.ACC without chaser

'Vodka is hard to drink for me.'

b. *vodku* *mne* *tjaželo* *pitj* ___1 *bez* *zakuski*

vodka.ACC 1SG.DAT hard.N.SG drink without chaser

'Vodka is hard to drink for me.'

Nevertheless, it is not necessarily the case that the example (5b) involves A-movement of the embedded object *vodku* 'vodka.ACC' across the overt experiencer *mne* '1SG.DAT'. In fact, there are two diagnostcs that show that the example (5b) does not involve A-movement. First diagnostic is reciprocal binding (binding of reflexives is not employed as a diagnostic: see Zubkov 2018 for a summary of complications that arise with Russian reflexives): as Pereltsvaig (2021) shows, reciprocal binding distinguishes between Russian OSV and OVS order (the former of which Pereltsvaig argues to involve Ā-movement of the object and the latter of which Pereltsvaig argues to involve A-movement of the object).

(6) a. Russian OVS order: A-movement of O

dueljantov$_i$ *ubili* *vystrely* *[drug druga]*$_i$.

duelists.ACC killed.PL shots each other

'Duelists were killed by each other's shots.'

b. Russian OSV order: no A-movement of O

* *dueljantov*$_i$ *vystrely* *[drug druga]*$_i$ *ubili.*

duelists.ACC shots each other killed.PL

Int:'Duelists were killed by each other's shots.'

As the examples in (7) show, the embedded object, when moved above the experiencer argument,

not only cannot bind a reciprocal inside the experiencer, but also exhibits reconstruction for the purposes of reciprocal binding: the experiencer is able to bind into the reciprocal contained in the moved embedded object.

(7) Context: Romeo and Juliet discuss their predicament.

a.* *nas* *roditeljam* *drug druga* *tjaželo* *poljubitj*

1PL.ACC parents.DAT each other.GEN hard.N.SG love.INF

Int: 'We are hard for each other's parents to love.'

b. *roditelej* *drug druga* *nam* *tjaželo* *poljubitj*

parents.ACC each other.GEN 1PL.DAT hard.N.SG love.INF

'It's hard for us to love each other's parents.'

Another diagnostic is weak crossover effects: it is generally degraded for Ā-movement of a nominal phrase to occur across an intervening phrase that contains a co-indexed variable (see Safir 2017 for an overview). As shown by examples in (8), weak crossover shows the same contrast between OSV and OVS orders as reciprocal binding (Pereltsvaig 2021).

(8) WCO gives the same contrast between OSV and OVS orders

a. *každogo* *studenta* *ljubit* *ego* *naučruk*

every.ACC student.ACC love.PRES.3.SG his supervisor.NOM

'Every student is loved by his supervisor.'

b.* *každogo studenta ego naučruk ljubit*

every.ACC student.ACC his supervisor.NOM love.PRES.3.SG

'Every student is loved by his supervisor.'

Weak crossover shows that the movement of the embedded object over the overt experiencer is Ā-movement: example (9) is heavily degraded, just like the example (8b) with OSV order.

(9) WCO shows that no A-movement occurs.

* *každogo studenta ego naučruku tjaželo poljubitj*

every.ACC student.ACC his supervisor.DAT hard.N.SG love.INF

Int: 'Every student is hard for his supervisor to love.'

The conclusion, then, is that the movement involved in *tough*-constructions is A-movement as suggested by its minimality profile. A DP cannot undergo such movement if there is a DP generated higher than the intended extraction site. Another conclusion is that the experiencer DP c-commands the embedded non-finite clause, as evidenced by A-minimality. The partial structure for the Russian *tough*-construction is thus provided below. An open question concerns the size of the embedded clause. For example, if the clause is large enough to contain a PRO, the questions is raised whether the posited A-movement step circumvents the PRO and how. I leave this question for further research.

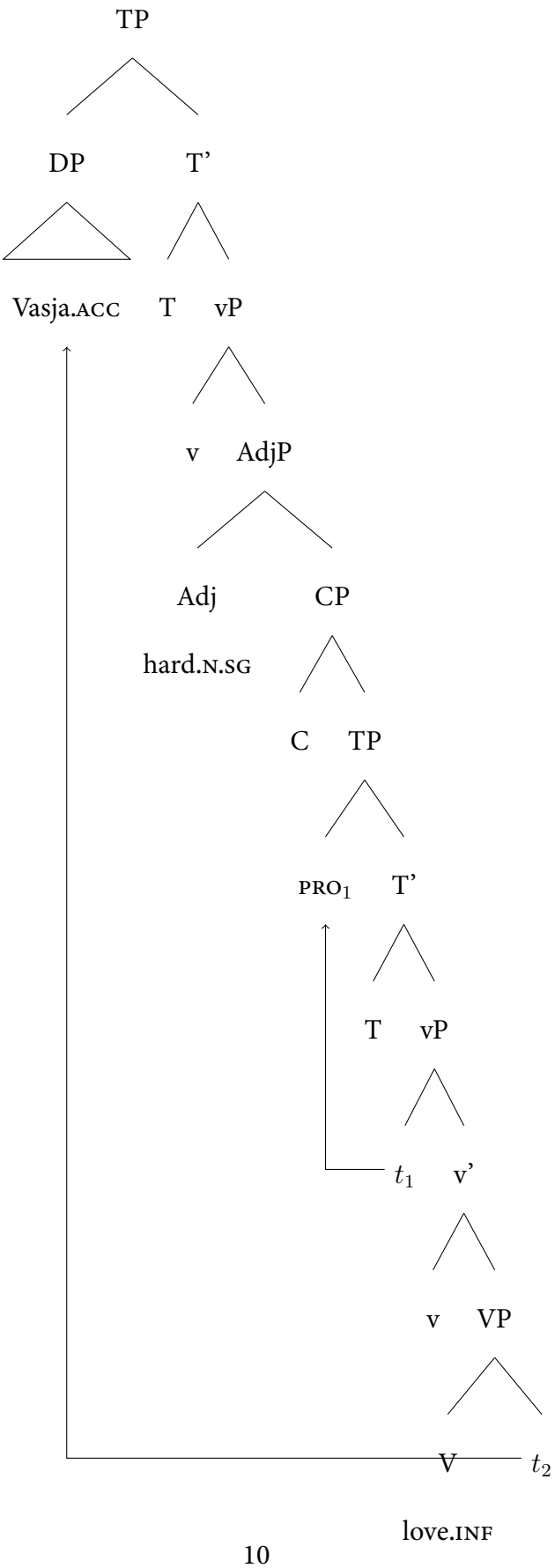
(10) Partial structure for Russian *tough*-constructions

a. *Vasju* *tjaželo* *ljubit* ___

Vasja.ACC hard.N.SG love.INF

'Vasja is hard to love.'

b. Structure for (a)



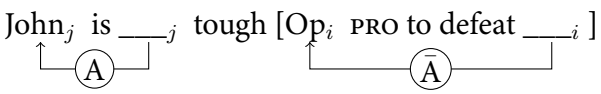
While the analysis appears to be motivated language-internally, the questions arises regarding the reasons why English does not employ such an A-movement step and why Russian does not employ null operator movement. Next section presents two attempts to answer this question.

3 On the differences between Russian and English

To reiterate the issue, while English *tough*-constructions are commonly assumed to involve an $\bar{A}$-movement step onto the periphery of the non-finite clause and an A-movement step to the subject position (as schematized in 11a), the current result is that Russian movement involves a single step of A-movement (as schematized in 11b).

(11) Movement steps in *tough*-constructions

a. English:



b. Russian:

The question therefore is as follows: why the derivation like (11b) is unavailable in English and why the derivation like (11a) is unavailable in Russian? This section shortly evaluates two ideas. The first idea is reductionist: English does not allow A-movement of nominal phrases with case and Russian does not have null operators. The main issue with the reductionist approach comes from the fact that Russian *tough*-constructions are compatible with A-movement of locative prepositional phrases

(assuming that locative inversion involves A-movement; see Bailyn 2004 and references therein). Since English also allows A-movement in locative inversion, the explanation cannot come from unavailability of certain types of A-movement. The second idea is to tie the derivational pathways to a *tough*-constructions with different realization of argument structure of *tough*-predicates in Russian and English: namely, I will suggest that only Russian *tough*-predicates take the embedded clause as their argument while English *tough*-predicates do not (see Williams 1983; Wilder 1991; Gluckman 2022 for examples of a modification analysis), building on the ellipsis argument of Contreras (1993). Recasting the argument-modifier asymmetry in configurational terms (Johnson 2003; Privoznov 2021) allows to understand the impossibility of extraction in English through islandhood.

3.1 A reductionist attempt

First, let us entertain the following idea. Russian has no null operators, whereas A-movement of non-nominative DPs in English is unavailable. Therefore, a Russian-style derivation (which requires A-movement of a cased DP) is unavailable in English and an English-style derivation (which requires null operator movement) is impossible in Russian. The Russian side of the proposal is somewhat straightforward, so I believe it to be more worthwhile to address the English side of the proposal.

One issue is that the proposal does not account for the lack of subject gaps in English *tough*-constructions (see Brillman 2017 for a recent discussion). Arguing that English A-movement does not target cased DPs constitutes an explanation for impossibility of A-movement derivation for English *tough* constructions makes an incorrect prediction regarding one of the famous contrasts between raising constructions and *tough* constructions, shown in (12). If illicit A-movement un-

derlies the null operator option for the object gap in (12b), it is unclear why A-movement cannot occur for the ungrammatical parse in (12c).

(12) a. John is eager ___ to please.

b. John is easy to please ___/

c. *John is easy ___ to please Mary.

Another issue with such proposal is that it does not generalize to A-movement of prepositional phrases, found in locative inversion. As the examples in (13) show, locative inversion is found both in Russian and in English.

(13) Locative inversion in English and Russian

a. Into the room walked Mary.

b. *V komnatu vošla Maša*

in room.ACC entered Masha

'Into the room walked Mary.'

As the example (14) shows, prepositional phrases may undergo Russian-type *tough*-movement (which, arguably, is also an A-movement step, given the availability of locative inversion in the langugage; see Bailyn 2004 for arguments in favor of A-movement in Russian locative inversion).

(14) *po ljdu tjaželo xodit'*

on ice hard.N.SG walk.INF

'It is hard to walk on ice.'

The issue then is that the illicit A-movement argument cannot extend to inability of English prepo-

sitional phrases to undergo *tough*-movement, as shown by the examples below.

(15) a. *[On ice] is tough to walk ___.

b. *[Into the room] is hard to walk ___ during the night.

Prepositional phrases are able to undergo A-movement, as locative inversion shows, and yet they cannot participate in *tough*-constructions, suggesting that the illicit A-movement idea is not general enough.

3.2 Variation in argument structure

On the first glance, one might think that the embedded clause of the *tough*-construction is a complement of the *tough*-predicate. For English, however, there are arguments against it. The one I focus on here comes from ellipsis. As Contreras (1993) notes, VP ellipsis is unavailable when the VP is an adjunct (Contreras 1993: 5).

(16) a. John persuaded Mary to leave, and Fred persuaded Jane to Δ.

b. *John runs to stay fit, and Bill swims to Δ.

The core observation is that VP ellipsis is unavailable in *tough*-constructions, as shown below. Therefore, English *tough*-constructions involve an adjoined non-finite clause.

(17) *John is easy for us to please, but Bill is hard for us to Δ.

Importantly for the current purposes, the adjunct/argument contrast is observed in Russian non-finite VP ellipsis, as demonstrated by the examples in (18) where the non-finite clause can be elided only if it is introduced by a clause-embedding predicate like *ask* whereas it cannot be elided if it acts

as a vP adjunct (in this case, a rationale clause).

(18) The argument/adjunct asymmetry with respect to VP ellipsis in Russian.

a. *Anton poprosil Mašu kupitj moloka, a Petja poprosil Natašu* Δ.
Anton asked Masha buy.INF milk and Petja asked Natasha
'Anton asked Masha to buy milk and Petja ask Natasha to buy milk.'

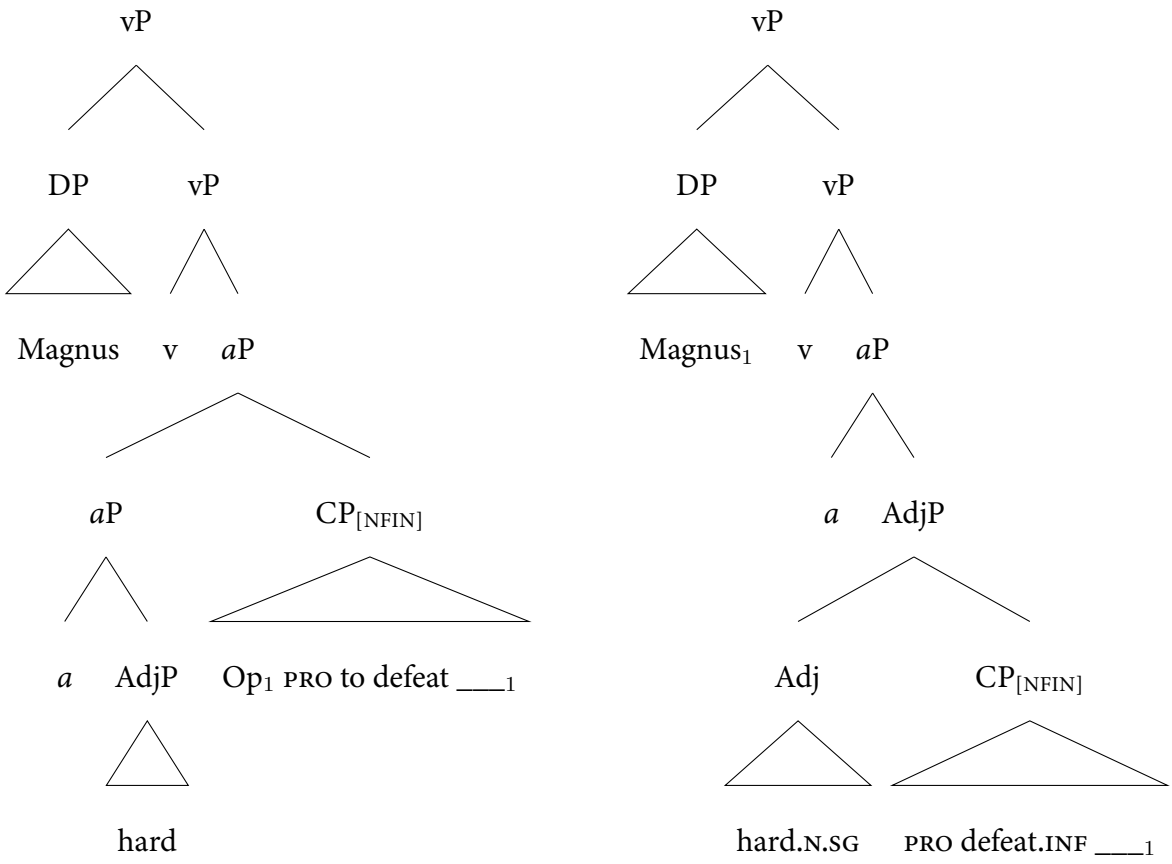
b.* *Anton pobežal v Perekrestok kuptij moloka, a Petja pobežal v Diksi* Δ
Anton ran to Perekrestok buy.INF milk and Petja ran to Diksi
Int.: 'Anton ran to Perekrestok to buy milk and Petja ran to Diksi to buy milk.'

Therefore, ellipsis of the embedded clause should constitute an argument in favor of a non-modification analysis of Russian *tough*-constructions. As the example (**??**) shows, the ellipsis is possible, highlighting another point of syntactic variation in *tough*-constructions.

(19) *Magnusa*$_1$ *tjaželo obygratj* ___$_1$, *a menja*$_2$ *legko* 〈 *obygratj* ___$_2$ 〉
Magnus.ACC hard.N.SG defeat.INF but 1SG.ACC easy.N.SG defeat.INF
'It is hard to defeat Magnus but it is easy to defeat me.'

The conclusion from the VP ellipsis diagnostic is that English *tough*-constructions involve a modificational embedded clause while Russian *tough*-constructions involve an argumental embedded clause. One way to understand this distinction is through height of attachment, as sketched in the structures below.

(20) Argument structure of English and Russian *tough*-constructions, juxtaposed



Such structural assumptions predict transparency of the embedded clause in Russian *tough*-construction but not English *tough*-construction, assuming that only sisters of syntactic heads can be extracted from (as argued for by the Spell-Out theory of adjunct islands; see Johnson 2003; Privoznov 2021). I therefore suggest that the unavailability of A-movement for English *tough*-constructions stems from the opacity of the embedded clause for extraction.

4 Conclusion and outlook

This squib has examined Russian *tough*-constructions against the background of the literature on English *tough*-constructions. The main empirical result is that Russian *tough*-movement is A-movement,

as I have argued on the basis of the observed A-minimality effects. As for the reason behind syntactic variation between English and Russian, I have proposed that the embedded clauses of *tough*-constructions in English and Russian differ in the height of attachment which predicts whether the clause is transparent for movement.

References

Bailyn, John Frederick. 2004. Generalized inversion. *Natural Language & Linguistic Theory* 22(1). 1–50.

Brillman, Ruth. 2017. *Tough constructions in the context of english infinitives*. Massachusetts Institute of Technology dissertation.

Chomsky, Noam. 1977. On wh-movement. In Peter Culicover, Thomas Wasow & Adrian Akmajian (eds.), *Formal syntax*.

Contreras, Heles. 1993. On null operator structures. *Natural Language & Linguistic Theory* 11(1). 1–30.

Gluckman, John. 2022. Taking time with the tough-construction. *Journal of Linguistics* 58(2). 233–268.

Hicks, Glyn. 2017. Tough-movement. In *The wiley blackwell companion to syntax, second edition*, 1–27. Wiley Online Library.

Johnson, Kyle. 2003. Towards an etiology of adjunct islands. *Nordlyd* 31(1).

Montalbetti, Mario, Mamoru Saito & Lisa Travis. 1982. Three ways to get 'tough'. In *Eighteenth regional meeting, chicago linguistic society*, 348–366.

Pereltsvaig, Asya M. 2021. The ovs order in russian: where are the o and the v? *Journal of Slavic Linguistics* 29(3). 1–15.

Privoznov, Dmitry. 2021. *A theory of two strong islands*. Massachusetts Institute of Technology dissertation.

Safir, Ken. 2017. Weak crossover. *The Wiley Blackwell Companion to Syntax, Second Edition*. 1–40.

Salzmann, Martin. 2023. Experiencer intervention in english tough movement: evidence from extraction of the tough adjective against syntactic-and semantic-intervention accounts. *Syntax* 26(2). 223–249.

Thoms, Gary. 2011. P-stranding diagnoses a'-movement in tough constructions. *Snippets* 24. 20.

Wilder, Christopher. 1991. Tough movement constructions. *Linguistische Berichte* 132. 115–132.

Williams, Edwin. 1983. Semantic vs. syntactic categories. *Linguistics and philosophy*. 423–446.

Zubkov, Peter. 2018. *The grammar of binding: a study with reference to russian*. Utrecht University dissertation.